

## ABSTRACT OF THE DISCLOSURE

### Method for controlling a drive motor of a positive displacement vacuum pump

A method for controlling a drive motor of a positive displacement vacuum pump comprises the following method steps: storing a curve (32) indicating a respective speed value  $n$  of the drive motor for inlet pressure values  $p$ , wherein the curve (32) comprises: an upper range (34) for inlet pressure values  $p$  larger than or equal to an upper limit pressure  $p_1$ , with a single constant upper speed value  $n_1$  being associated with said upper range (34), and an alteration range (36) for inlet pressure values  $p$  smaller than the upper limit pressure  $p_1$ , wherein in the alteration range different speed values  $n_v$  are associated with the inlet pressure values  $p$ ; determining the inlet pressure value  $p$ ; determining the speed  $n$  associated with the inlet pressure value  $p$  in the curve (32); and operating the drive motor (20) at the determined speed  $n$ . By providing an alteration range the vacuum pump can always be operated at a speed which allows maximum effective suction capacity of the positive displacement pump.

(Fig. 2)